

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Currently amended) A light source system, comprising two or more red color light emitting diodes; two or more blue color light emitting diodes; two ore more green color light emitting diodes; wherein said red color emitting diodes, said blue color emitting diodes and said green color emitting diodes are with different light emitting colors arranged at a predetermined ratio of quantities of diodes on a spherical curved surface; a mixer for projecting two or more incident monochromatic lights as a light mixed with said monochromatic lights; a cone shaped light source cover for covering said light emitting diodes and for mounting said mixer at a vertex of said light source cover; and a light emission controller for controlling the number of light emitting diodes of each color that are turned on~~said ratio of quantities of diodes is determined based on light emitting status for each diode of each color so that a projected light has chromaticity of a desired color, and total quantity of said light emitting diodes is set so as to satisfy said ratio of quantities of diodes.~~

2. (Cancelled)

3. (Currently amended) A light source system according to claim 1, wherein said

~~spherical curved surface where said light emitting diodes are arranged at the predetermined ratio of quantities of diodes is~~ light emitting diodes are arranged on an elliptical surface of rotation or on a parabolic surface of rotation.

4. (Cancelled)

5. (Currently amended) A light source system according to claim 1 [[4]], wherein said ~~light emitting diodes are arranged on~~ concentric ~~and multiple circles comprise circles,~~ wherein light emitting diodes with different light emitting colors are arranged.

6. (Currently amended) A light source system according to claim 1 [[4]], wherein said ~~light emitting diodes are arranged on~~ concentric multiple circles ~~comprise circles,~~ wherein light emitting diodes of the same light emitting color are arranged on each circle.

7. (Currently amended) A light source system according to claim 1, wherein ~~said light emission controller controls lightness by controlling the number of diodes that are turned-on at the predetermined ratio of quantities, and said light emission controller controls color by controlling the number of light emitting diodes that are turned-on~~ light emission of the light emitting diodes is controlled for each different color.

8. (Cancelled)

9. (Currently amended) A light source system according to claim 1 8, further comprising a lens unit which has condenser lenses, wherein each of said wherein each of said light guiding means ~~is a condenser lens~~ lenses is opposite corresponding to each of said light emitting diodes arranged on said spherical curved surface on a 1:1 basis, and said lens unit converges light beams to said mixer.

10. (Cancelled)